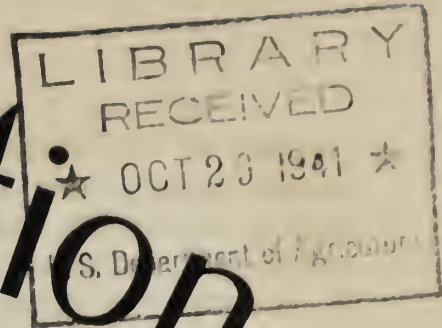


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# Dairy Production



Issued Monthly by

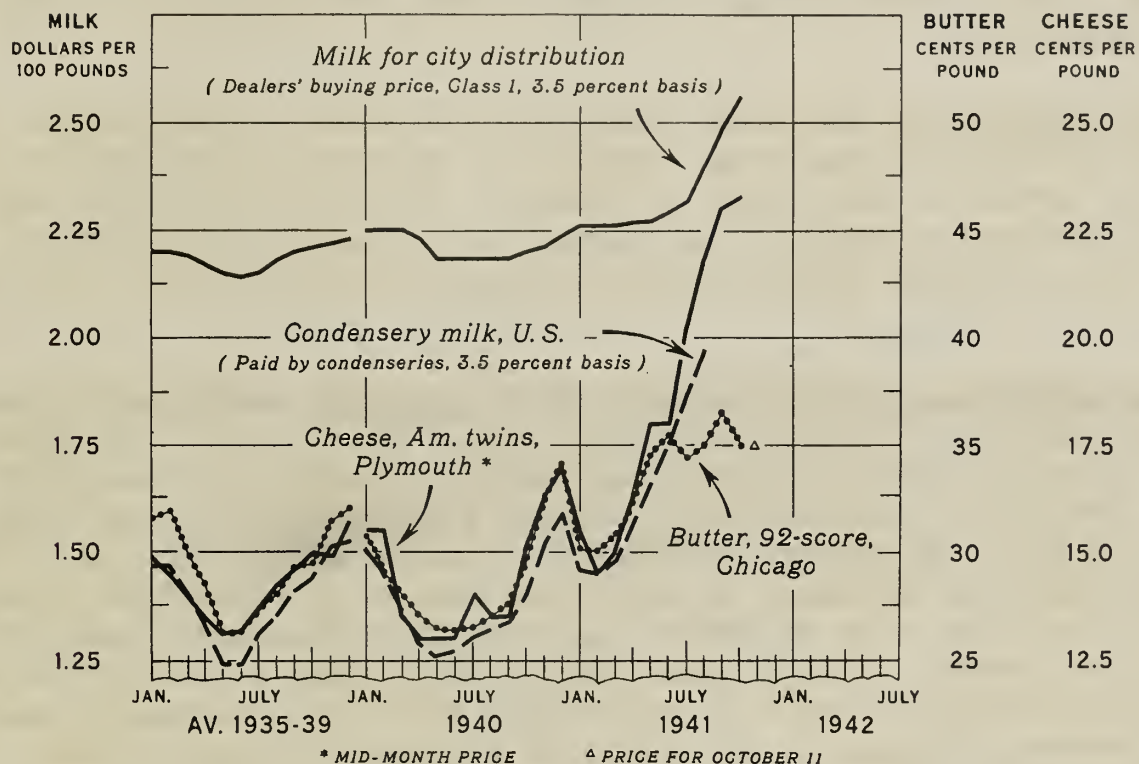
AGRICULTURAL MARKETING SERVICE  
UNITED STATES DEPARTMENT OF AGRICULTURE

No. 18

A.M.S.

OCTOBER 15, 1941

PRICES OF SELECTED DAIRY PRODUCTS, UNITED STATES,  
AVERAGE 1935-39, AND 1940-41



U. S. DEPARTMENT OF AGRICULTURE

NEG. 517 AGRICULTURAL MARKETING SERVICE

NEW CONDITIONS HAVE CAUSED MARKED CHANGES IN THE RELATIVE PRICES OF DAIRY PRODUCTS. THE PRICE OF BUTTER, WHICH NORMALLY DECLINES FROM FEBRUARY TO JUNE, CONTINUED TO RISE DURING THAT PERIOD AND UNTIL CHECKED BY RECORD PRODUCTION AND THE ACCUMULATION OF RECORD STOCKS. THE PRICE OF CHEESE, BOOSTED BY HEAVY BUYING FOR EXPORT, INCREASED WITH THE PRICE OF BUTTER AND THEN ROSE NEARLY 30 PERCENT MORE TO A RECORD HIGH LEVEL COMPARED WITH PRICES OF MOST OTHER DAIRY PRODUCTS. THE PRICE PAID FOR MILK FOR DISTRIBUTION IN CITIES WAS RELATIVELY HIGH LAST SPRING BUT UNTIL RECENTLY IT INCREASED ONLY SLIGHTLY AND, CONSIDERING THE DIFFERENCE IN LOCATION AND IN COST OF PRODUCTION, IT IS NOW RELATIVELY LOW IN COMPARISON WITH THE PRICES BEING PAID FOR THE MILK USED FOR MANUFACTURING PURPOSES. PRESENT PRICES OF THE VARIOUS DAIRY PRODUCTS ARE SO FAR FROM THEIR USUAL RELATION TO EACH OTHER THAT THEY ARE LIKELY TO CAUSE EXTENSIVE CHANGES IN REGIONAL PRODUCTION AND IN LOCAL DAIRY PRACTICES.



## DAIRY PRODUCTION SUMMARY

This is a period characteristic of conditions in a world at war. It is a period of rapid adjustment to changing prices and costs. It is a period of great uncertainty, with conflicting views on price trends, on price control, and on the extent to which our consuming habits must be changed to produce a satisfactory volume of defense supplies. It is, therefore, a period of day-to-day adjustments to constantly changing prices and costs, with few people pretending to see very far into the future.

On the farms there has been a stepping up of production, helped by near-record supplies of grain and hay, record crop yields per acre and ample rainfall over large areas in the West. This condition may be temporary, however. The movement of manpower away from the farms has begun. Crop production has been little affected as yet, for the use of tractors and improved machinery is increasing. But defense wages are high compared with what can be earned on the farms. Milking cows to sell butterfat earns only low wages. If help becomes really scarce so that western Corn Belt farmers have to choose between reducing their crops or milking fewer cows it will take a seemingly high price for butterfat to keep dual purpose cows in production.

Milk production continues heavy but not above current needs. The number of milk cows continues to increase. Reports on production per cow are at record or near-record levels in all groups of States. Milk production per day about October 1, production during the month of September and production during the 9 months of this year to date were each about 5 percent above production during the same period last year.

The production of manufactured dairy products in September was about 10 percent above production in September last year. The increase in butter was only 2 or 3 percent over last year but American cheese production increased 22 percent. Output of evaporated milk probably increased substantially over last year for in August there was a 27 percent increase. In areas where there are cheese factories or condenseries the diversion of milk from butter to other uses appears to be increasing, but the price of butter has been high enough to increase cream deliveries in other areas. Though there has probably been a substantial increase in ice cream production and some in fluid milk sales, the currently heavy production of dairy products appears to be largely a response to export needs. In August the increases in the production of cheese and condensed and evaporated milk accounted for nearly half of the estimated increase in milk production. In September preliminary figures indicate they may have accounted for three-fourths of the increase in milk.

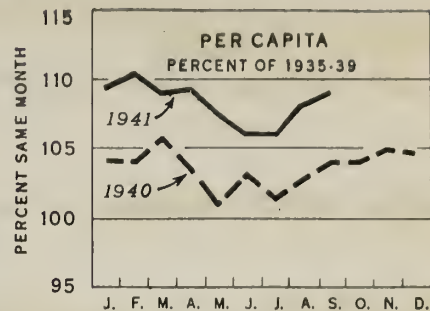
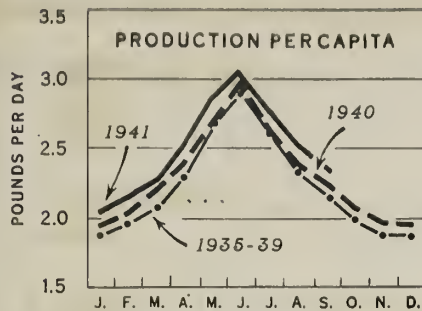
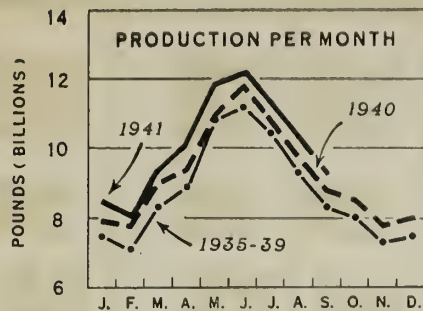
Stocks of dairy products on October 1 appear to have been the heaviest on record for any month but they only slightly exceeded holdings on October 1, 1938. Holdings of butter on October 1 were only slightly less than in 1938 and in 10 cities they showed almost no decrease during the first two weeks of October. Stocks of cheese are very large but not excessive under present conditions.

Prices of feeds dropped 5 percent from the unduly high quotations of a month ago but they still average 45 percent higher than a year ago, whereas corn is only about 10 percent higher and oats 30 percent higher. The relatively low prices of feed grains compared with commercial feeds and the relatively high prices of cheese and evaporated milk compared with milk for city distribution now tend to favor dairymen in the North Central States compared with those in the Northeast.

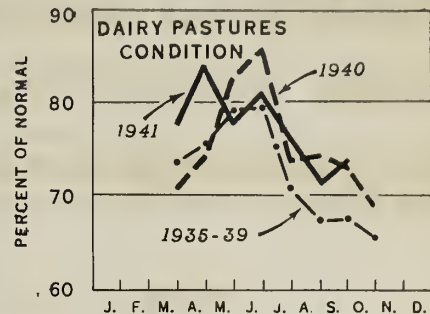
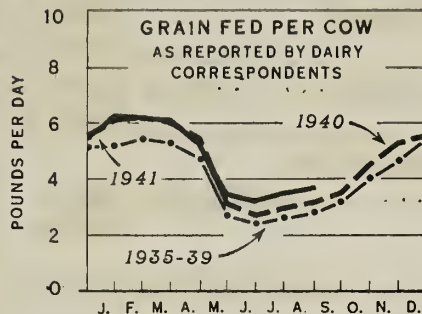
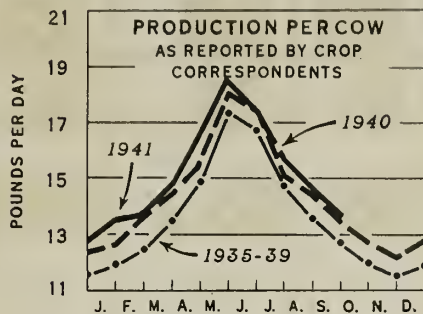


# DAIRY STATISTICS: GRAPHIC SUMMARY FOR THE UNITED STATES

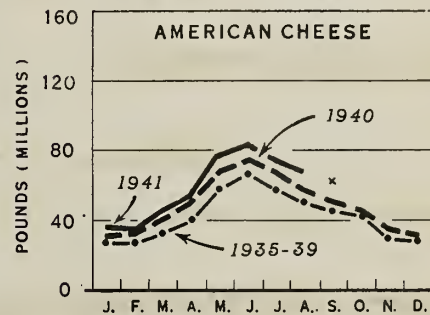
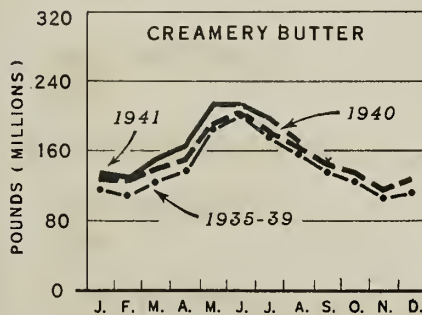
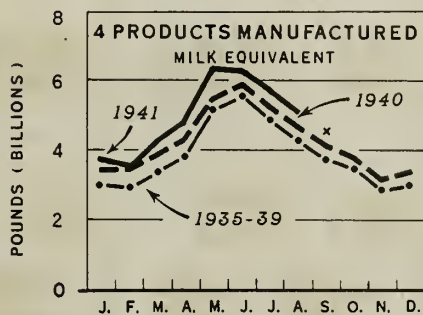
## MILK PRODUCTION ON FARMS



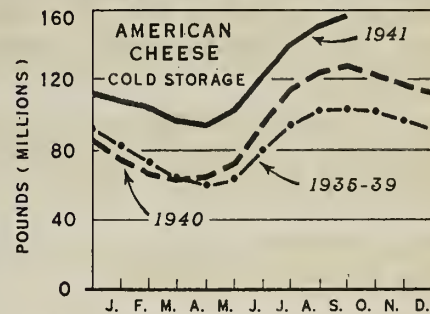
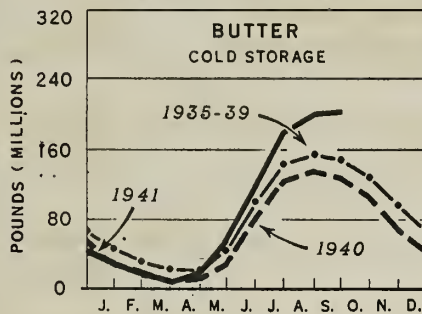
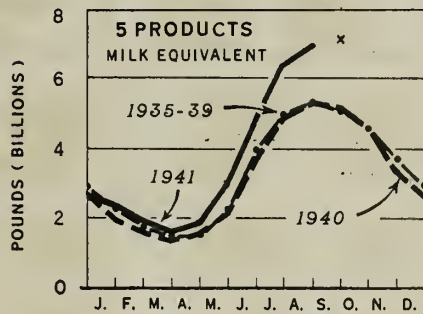
## MILK PRODUCTION FACTORS



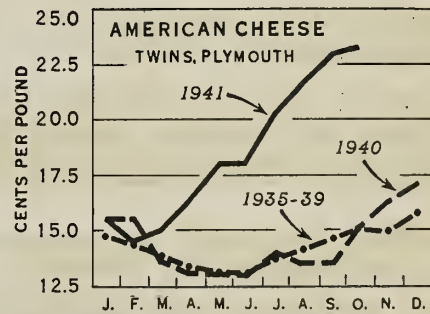
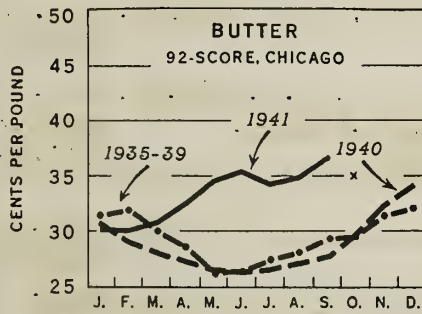
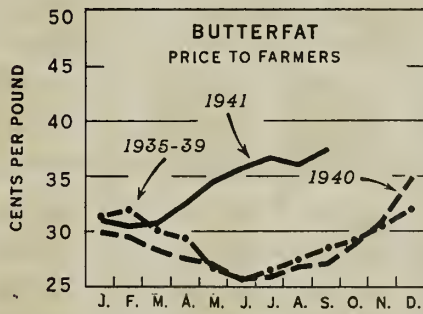
## DAIRY PRODUCTS MANUFACTURED



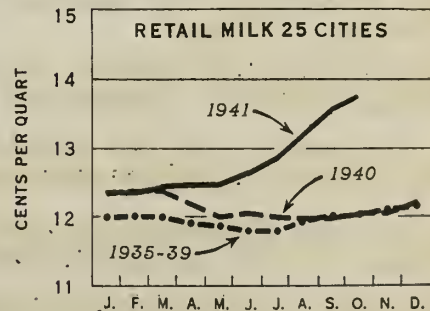
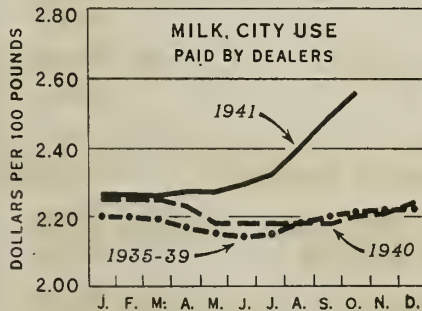
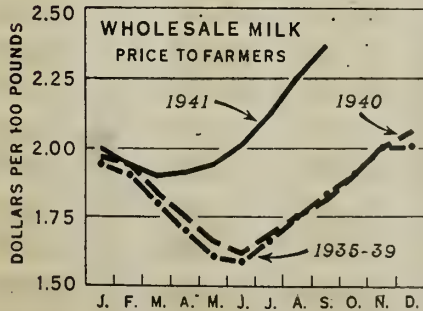
## STOCKS



## PRICES



## PRICE OF MILK



\* APPROXIMATION BASED ON INFORMATION AVAILABLE TO ABOUT 12TH OF CURRENT MONTH

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

Dairy Production

October 15, 1941

SUMMARY OF DAIRY STATISTICS FOR THE UNITED STATES

		Average 1935-39	1940	1941	
				Total or average	Percent of 1940
MILK PRODUCTION ON FARMS:					
Total, per month.....mil.lb.	July	10,443	10,865	11,362 <u>a/</u>	104.6
	Aug.	9,330	9,812	10,385 <u>a/</u>	105.8
	Sept.	8,338	8,880	9,330 <u>a/</u>	105.1
Per capita, daily average.....lb.	Aug.	2.325	2.398	2.521 <u>a/</u>	105.1
	Sept.	2.145	2.241	2.339 <u>a/</u>	104.4
Per cow, per day.....lb.	Aug. 1	14.69	14.98	15.68	104.7
(As reported by crop correspondents)	Sept. 1	13.56	14.39	14.68	102.0
	Oct. 1	12.73	13.40	13.70	102.2
DAIRY PASTURES: Condition, % of normal.....pct.		Sept. 1	67.5	74.1	71.3
		Oct. 1	67.7	72.8	73.7
PRODUCTION OF MANUFACTURED DAIRY PRODUCTS:					
Creamery butter, monthly .....mil.lb.	Aug.	156.7	165.4	171.3 <u>b/</u>	103.6
	Sept.	137.6	145.5 <u>b/</u>	149.0 <u>a/</u>	102.4
weekly .....week ending Oct. 9		--	--	--	101.1
American cheese, monthly.....mil.lb.	Aug.	51.5	57.8	68.5 <u>b/</u>	118.5
	Sept.	45.4	51.9 <u>b/</u>	63.6 <u>a/</u>	122.5
weekly.....week ending Oct. 9		--	--	--	125.8
Evaporated milk, case .....mil.lb.	July	212.5	260.6	299.6	115.0
	Aug.	176.2	231.0	293.4	127.0
4 products, milk equivalent .....mil.lb.	July	4,896	5,334	5,739	107.6
(Creamery butter x 21, all cheese except	Aug.	4,336	4,726	5,114	108.2
skim x 10, canned cond.& evap.milk x 2.2)	Sept.	3,816	4,149	--	109.9 <sup>c</sup>
STOCKS ON HAND:					
Butter in cold storage .....mil.lb.	Sept. 1	155.6	134.3	200.2	149.1
(Including government holdings)	Oct. 1	148.3	128.1	202.7	158.2
Commercial holdings, only.....	Oct. 1	122.6	128.0	200.5	156.6
American cheese .....mil.lb.	Sept. 1	104.1	126.3	151.9	120.3
(Cold storage holdings)	Oct. 1	104.4	128.1	156.8	122.4
Evaporated milk, case..... mil.lb.	Aug. 1	280.3	321.3	261.6	81.4
(Manufacturers' stocks)	Sept. 1	299.7	349.4	289.9	83.0
5 products, milk equivalent ..... mil.lb.	Aug. 1	4,985	4,960	6,359	128.2
(Butter, all cheese, canned cond.& evap.	Sept. 1	5,360	5,318	7,038	132.3
milk plus cream in cold storage)	Oct. 1	5,088	5,245	7,177 <u>c/</u>	136.8
PRICES:					
Butterfat, per pound ..... ct.	Aug. 15	27.3	26.7	36.0	134.8
(Prices received by farmers)	Sept. 15	28.5	27.1	37.2	137.3
Butter, wholesale, per pound..... ct.	Sept. 1	29.27	27.59	36.59	132.6
(92 score, Chicago)	Oct. 1	29.47	29.51	35.00 <u>d/</u>	118.6
American cheese, wholesale, per pound ..... ct.	Sept. 15	14.55	13.50	23.00	170.4
(Twins, Plymouth, Wisconsin)	Oct. 15	15.00	15.00	23.25	155.0
Milk, wholesale, per 100 pounds.....dol.	Aug. 15	1.75	1.77	2.28 <u>b/</u>	128.8
(All purposes, prices received by farmers)	Sept. 15	1.84	1.84	2.37 <u>a/</u>	128.8
Milk for city distribution, per 100 lbs. ....dol.	Sept. 1	2.20	2.18	2.49 <u>b/</u>	114.2
(Prices paid by dealers, 3.5% basis)	Oct. 1	2.21	2.20	2.56 <u>a/</u>	116.4
Milk, retail, delivered, per quart.....ct.	Sept. 1	12.00	11.98	13.59 <u>b/</u>	113.4
(Average, 25 markets)	Oct. 1	12.06	12.06	13.74 <u>a/</u>	113.9

a/ Preliminary. b/ Preliminary revision. c/ Forecast or interpolation. d/ Price Oct. 14.



Milk production in September is estimated at 9.3 billion pounds. This is one billion pounds above the 1935-39 average for September and indicates a 9 month total, January 1 to October 1 about 9 billion pounds above the average for the period. Per capita production in September, estimated at 2.34 pounds per day was 9 percent higher than average for September. With the number of milk cows increasing gradually, feed supplies generally ample and dairy products in keen demand, production seems likely to continue at a very high rate in the next few months.

MONTHLY MILK PRODUCTION ON FARMS, UNITED STATES  
1935-39 Average, 1940, and 1941

Month	Monthly Total			Daily Average per Capita			
	Average			1941	Average		
	1935-39	1940	1941	1940	1935-39	1940	1941
		Million pounds		Pct.		Pounds	
January	7,480	7,952	8,448	103	1.871	1.950	2.058
February	7,124	7,801	8,008	103	1.957	2.044	2.159
March	8,342	9,006	9,331	104	2.084	2.207	2.271
April	8,926	9,444	10,020	106	2.304	2.390	2.519
May	10,719	11,076	11,826	107	2.676	2.712	2.876
June	11,195	11,805	12,180	103	2.886	2.985	3.059
July	10,443	10,865	11,362	105	2.604	2.657	2.760
August	9,330	9,812	10,385	106	2.325	2.398	2.521
September	8,338	8,880	9,330	105	2.145	2.241	2.339
Jan.-Sept. Incl.	81,899	86,641	90,890	104.9	2.319	2.399	2.509
October	7,992	8,510	--	--	1.989	2.077	--
November	7,303	7,845	--	--	1.876	1.977	--
December	7,516	8,076	--	--	1.863	1.968	--
Yearly Total	104,710	111,072	--	--	2.216	2.301	--

In the North Atlantic States milk production per cow continued at record levels despite the very poor condition of pastures, and on October 1 this year averaged more than half a pound per cow higher than on that date in any of the previous 16 years of record. To replace the pasturage usually available at this season, many farmers have had to draw upon scanty supplies of hay, grain and silage. In the South Atlantic States pastures have been affected by drought and production per cow on October 1 was somewhat lower than at the same time last year, but still 10 percent above average for the date.

In the East North Central States production per cow was well maintained through September. In Ohio and Illinois record high figures for October 1 were reported while in Indiana, Michigan, and Wisconsin October 1 production per cow has been higher in only one or two of the past 16 years. In the West North Central States production per cow on October 1 was only slightly below last year's record for the date despite the unusually sharp decline in percentage of milk cows milked that has taken place in the past two months. Pastures improved rather generally in these States during September and feed supplies are unusually abundant. In the South Central States production per cow declined somewhat more than usual, but continued close to the highest for the date in recent years. In the Western States pastures have been unusually good and production per cow, although declining seasonally was exceptionally high for the date.

For the country as a whole, October 1 milk production per cow in herds kept by crop correspondents averaged 13.70 pounds compared with 13.40 pounds on the same date last year and a 1930-39 average of 12.38 pounds. In these herds the proportion of the milk cows reported in production averaged 71.5 percent, lower than in any of the previous 6 years, but somewhat higher than the 1930-39 average of 70.9 percent.



The condition of dairy pastures on October 1 averaged 73.7 percent of normal, slightly lower than on that date in 1935 and 1933 but otherwise the best for October 1 since 1928. During September pastures improved considerably in the major dairy manufacturing region including the Western Great Lakes Area and the North Central States west of the Mississippi River. However, in many important fluid milk areas of the East and Northeast condition of pastures declined sharply because of drought with some States showing the lowest October condition in many years. Since the first of October additional rainfall has benefited dry areas from the Ohio Valley westward and northward, and in some parts of the Northeast.

In the Atlantic Seaboard States from New England to South Carolina September rainfall was less than 50 percent of normal and in New Jersey, Delaware, and Maryland it dropped to less than 15 percent of normal. In portions of this area subsoil moisture had not been fully replenished since the extremely dry weather this spring. In all of these States considerable areas of pasture were very poor on October 1 and in only limited areas were drought conditions relieved in the first two weeks of October. Pastures were also poor on October 1 in a broad area extending from central Michigan southwestward into Tennessee and Arkansas. Pastures are good for this time of the year from the Great Plains westward.

POPULATION PER COW, COST OF FEED, METHOD OF SALE AND RETURNS  
FROM DAIRY PRODUCTS SOLD BY GROUPS OF STATES, 1940 1/

	People	Price of Hay	Price of Feed	Price of 1 ton Hay & 1/2 ton Feed	Milk or Cream	Method of Sale	Whole-cream	Butterfat	Churned butterfat	Returns per lb. of butterfat
	per Cow 2/	Dol. per Ton 3/	Dol. per 100 lb. 4/	Dol. 5/	Percent 6/	Percent	Percent	Percent	Percent	Percent
N. Atl.	11.2	11.99	1.72	29.19	11.5	84.0	2.5	2.0	63.8	
E.N. Cent.	4.5	7.48	1.24	19.88	5.0	69.8	24.5	.7	41.9	
W.N. Cent.	2.1	5.24	1.06	15.84	3.7	14.8	81.0	.5	32.2	
S. Atl.	9.5	11.86	1.65	28.16	20.2	53.9	14.4	11.5	63.4	
S. Cent.	5.0	8.88	1.40	22.88	12.9	38.3	42.4	6.4	42.0	
West.	6.5	7.85	1.38	21.65	9.2	55.5	34.7	.6	45.6	
U. S.	5.4	8.13	1.34	21.53	7.6	52.5	38.2	1.7	44.2	

1/ The relation of columns 2, 3, 5, and 9 to column 1 is shown in graphic form on page 8 of this issue. For more complete explanations and details by States see pages 1, 8, 9, and 10 of Dairy Production, May 15, 1941.

2/ Computed from Census of Population April 1940 and estimated average number of milk cows on farms during the year.

3/ Average price of loose hay on 6 dates of feeding period.

4/ Average of February 1 and November 1 reports from dairy correspondents showing value per 100 lbs. of the grain and concentrate ration being fed to milk cows on their farms.

5/ Quantities of milk marketed in each form as percent of milk marketed in all forms.

6/ Receipts of farmers from sales of milk, cream, and butter per pound of butterfat in the milk marketed in all forms.

When conditions in various regions or States are compared, it appears to be generally true that the larger the number of people in an area relative to the number of cows, the higher are the returns that dairymen receive per unit of product sold and the higher are many of the costs of production. Apparently, whenever the prices received for dairy products are temporarily high in comparison with costs, there is a tendency for dairymen to continue to increase their herds until the more abundant supply of milk and the increasing competition for the available feed and pasturage pull prices down and push costs up till only a normal margin of profit remains. Regional averages of some items of costs and returns are shown in the table above but the tendency for the differences to be proportional can best be seen from the graphs on page 8. In these graphs dots for each group of States are placed above the proper points on the "people per cow" scale at the bottom of the graph and directly opposite the regional averages as measured on the left-hand scales. Where the inter-regional differences in reported hay and feed costs, percentage of milk sold at retail or returns per unit are proportional to present indications of differences in the number of people per milk cow in the areas, the dots are in a straight line. The diagonal lines on the chart are merely to indicate general relations that appeared to exist in 1940.



## DAIRY PRODUCTION

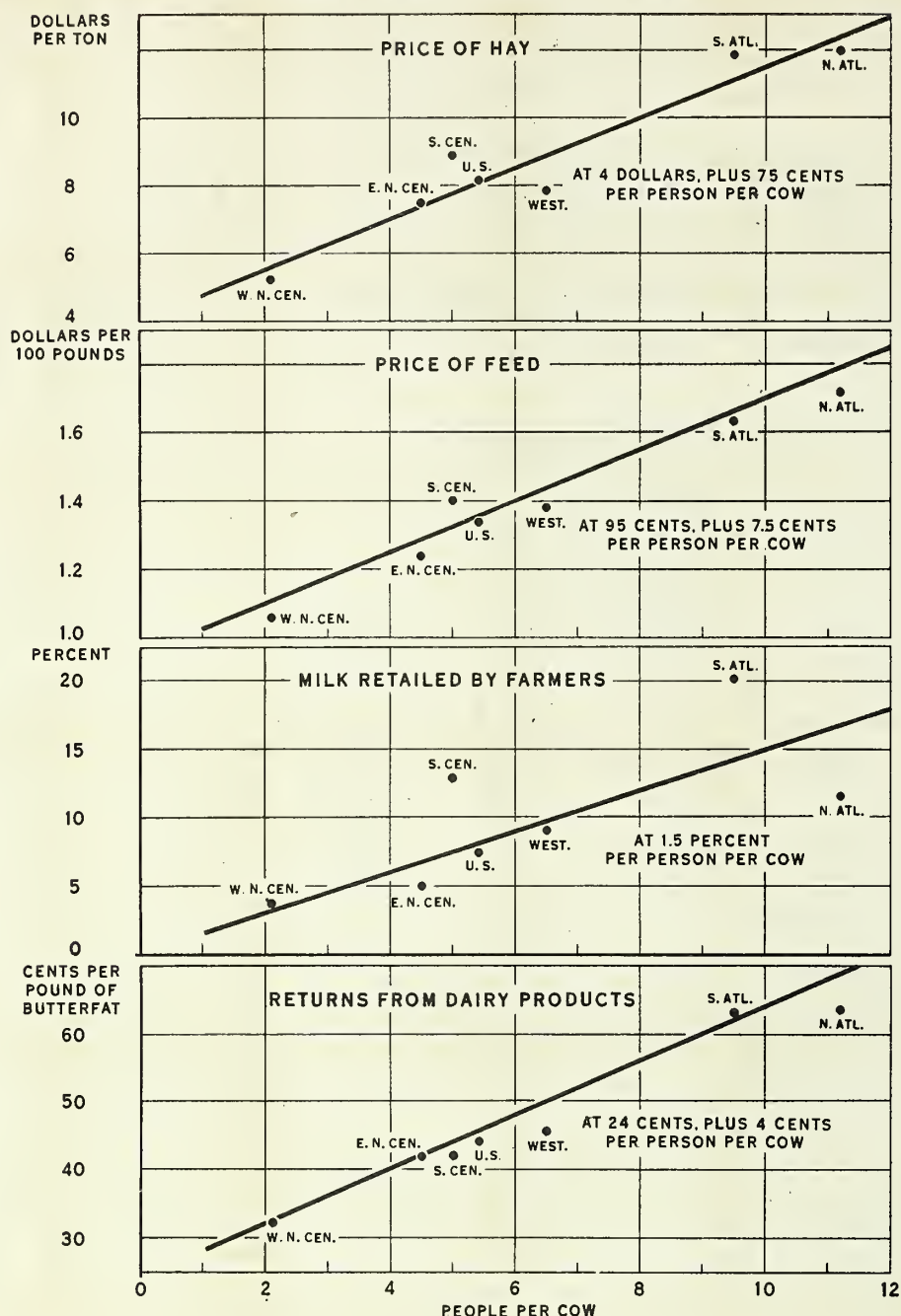
	Milk Produced per Milk Cow in			Condition of Dairy Pastures 2/		
	Herds kept by Reporters 1/					
	Oct. 1	Oct. 1	Oct. 1	Oct. 1	Oct. 1	Oct. 1
	Av. 1930-39	1940	1941	Av. 1930-39	1940	1941
	Pounds			Percent		
Maine	13.9	14.7	16.6	76.4	67	57
N.H.	14.8	14.5	16.5	75.2	71	64
Vt.	13.5	14.6	14.7	78.5	73	61
Mass.	17.7	17.6	18.0	76.8	63	48
R.I.	3/	3/	3/	77.7	70	44
Conn.	16.9	16.3	19.8	76.6	63	54
N.Y.	16.1	16.1	17.4	70.1	73	52
N.J.	18.1	19.0	19.9	70.3	79	41
Pa.	15.9	17.5	17.3	67.5	81	58
N.ATL.	15.97	16.67	17.54	70.3	76.1	54.9
Ohio	14.6	15.2	16.1	68.5	70	64
Ind.	13.8	15.0	14.8	69.8	57	56
Ill.	13.0	14.9	15.4	63.3	53	78
Mich.	15.8	17.9	17.7	67.4	89	64
Wis.	14.0	14.3	16.0	65.0	82	81
E.N.CENT.	14.18	15.42	16.01	66.3	74.2	71.8
Minn.	12.0	12.9	12.5	61.2	73	79
Iowa	12.3	14.0	13.8	67.8	84	82
Mo.	9.8	11.9	11.8	57.1	72	77
N.Dak.	10.7	11.9	11.0	43.4	67	88
S.Dak.	9.7	10.4	9.8	43.8	55	65
Nebr.	11.5	12.1	12.6	53.5	41	74
Kans.	11.2	12.2	12.4	52.1	70	84
W.N.CENT.	11.19	12.35	12.16	58.1	70.0	78.8
Del.	3/	3/	3/	72.8	79	46
Md.	14.7	16.4	15.0	69.7	82	44
Va.	11.8	13.4	13.4	70.8	88	54
W.Va.	12.4	12.8	11.8	67.2	77	76
N.C.	11.6	12.9	12.7	74.9	74	64
S.C.	10.1	10.5	10.3	63.4	59	61
Ga.	8.5	8.8	9.4	66.4	68	67
Fla.	3/	3/	3/	80.1	76	85
S.ATL.	11.15	12.37	12.26	70.2	76.3	61.3
Ky.	11.9	12.1	12.3	69.9	62	55
Tenn.	10.2	10.9	11.4	65.9	63	60
Ala.	7.7	8.6	8.9	68.4	62	74
Miss.	6.9	6.6	7.1	67.0	72	77
Ark.	8.0	8.7	9.5	56.4	75	76
La.	3/	3/	3/	70.1	80	84
Okla.	9.3	9.8	10.2	50.6	72	84
Tex.	8.8	9.1	9.2	60.5	67	91
S.CENT.	9.03	9.33	9.71	62.2	67.8	76.0
Mont.	13.0	15.2	14.5	59.0	73	91
Idaho	16.8	17.1	17.5	72.2	88	95
Wyo.	12.3	13.0	13.4	67.0	74	96
Colo.	12.0	13.9	14.0	60.9	69	91
N.Mex.	3/	3/	3/	69.0	67	95
Ariz.	3/	3/	3/	81.8	76	90
Utah	3/	3/	3/	66.4	65	90
Nev.	3/	3/	3/	75.2	83	96
Wash.	16.7	17.5	17.8	64.9	72	94
Oreg.	14.4	15.4	15.7	66.6	73	91
Calif.	17.2	19.0	19.4	69.7	83	84
WEST.	14.49	16.00	16.49	67.2	76.5	89.4
U.S.	12.38	13.40	13.70	64.4	72.8	73.7

1/ Averages represent the reported daily milk production of herds kept by reporters divided by the total number of milk cows (in milk or dry) in these herds. Figures for New England States are based on combined returns from crop and special dairy reporters and are weighted by counties. Figures for other States, regions, and U. S. are based on returns from crop reporters only.

2/ State averages are based on reports by crop correspondents. For regional and U. S. averages the States are combined in proportion to the importance of pastures to dairy production on October 1.

3/ State averages omitted because of instability, but reports are included in arriving at regional averages.

PRICES OF HAY AND FEED, PERCENTAGE OF MILK RETAILED,  
AND RETURNS FROM DAIRY PRODUCTS, RELATED  
TO NUMBER OF PEOPLE PER COW, 1940



U. S. DEPARTMENT OF AGRICULTURE

NEG. 518 AGRICULTURAL MARKETING SERVICE

GOING FROM A REGION WHERE THERE ARE RELATIVELY FEW PEOPLE IN PROPORTION TO THE NUMBER OF MILK COWS TO A REGION WHERE THE POPULATION PER COW IS DENSER, ONE NORMALLY FINDS HAY AND FEED BRINGING HIGHER PRICES, A LARGER PROPORTION OF THE MILK BEING MARKETING IN THE HIGHER PRICED FORMS, AND PRODUCERS RECEIVING LARGER GROSS RETURNS PER UNIT FOR THE DAIRY PRODUCTS SOLD. THIS REGIONAL ADJUSTMENT IS USUALLY CLOSE, AS IT WAS IN 1940, BUT IN RECENT MONTHS IT HAS BEEN DISTURBED BY THE SHARP CHANGES IN RELATIVE PRICES SHOWN ON PAGE 1. FOR DETAILS AND EXPLANATION SEE PAGE 6.